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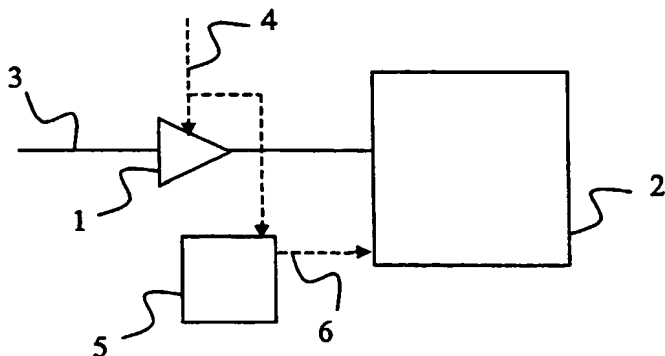
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(54) Title: **POWER AMPLIFIER EFFICIENCY**



(57).Abstract: The present invention relates to a method and an arrangement for optimizing the efficiency of a power amplifier (1) that is utilized for transmission of radio signals in a portable radio communication device, such as a mobile phone. The impedance loading the power amplifier (1) is controlled by a controller (5) in dependence on a transmission power of the portable radio communication device, wherein the radiating impedance of an antenna element (2) loading the power amplifier is controlled in dependence of the desired load impedance. Preferably, the changing of radiating impedance is performed by changing a capacitive coupling between the antenna element and a ground element or by changing the size of the antenna element. Better efficiency and bandwidth

are thereby attained.